

Suppose S is a string 001111011011 ,
 if quantization parameter $m_1 = 3$, then alphabet $AV_1 = \{001, 111, 011, 011\}$
 if quantization parameter $m_2 = 4$, then alphabet $AV_2 = \{0011, 1101, 1011\}$

Quants/Letters 34

FIGURE 1

Tag data element

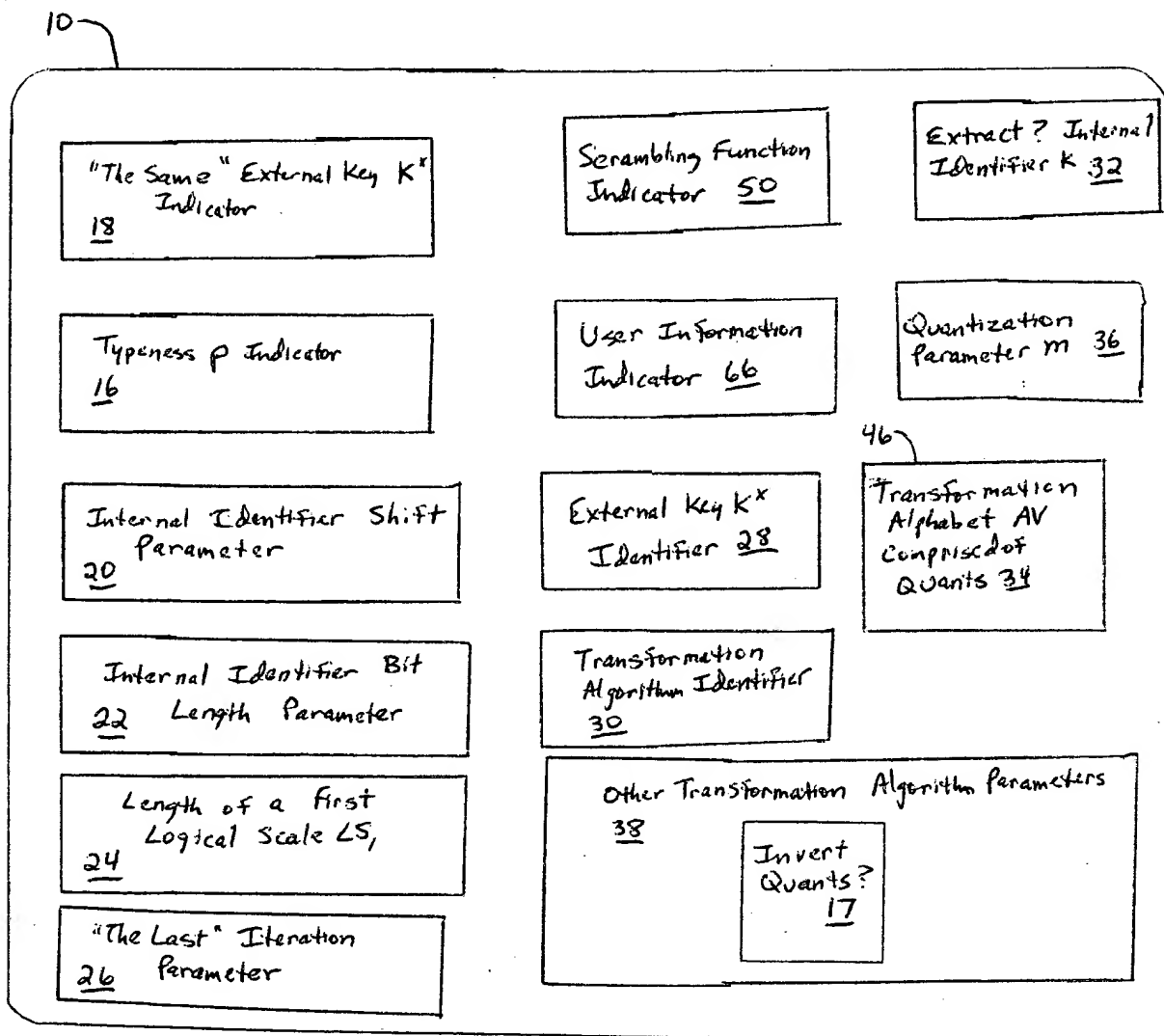


FIGURE 2

$AV'_n \in AV_n$ where $n = 1, 2, \dots, P$ 13

$AV'_n = f\{m_n, M_n\}$, where m is quantization parameter

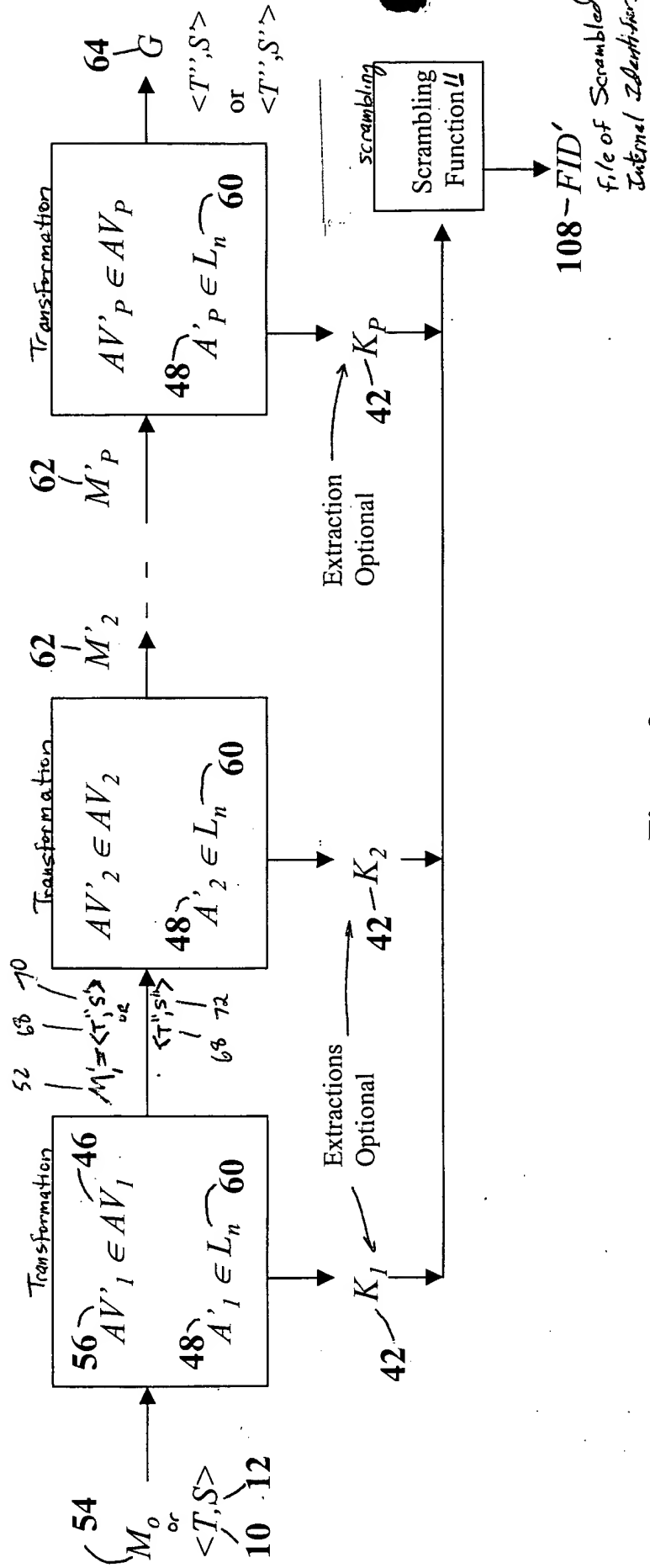


Figure 3

Initial Binary Sequence

Form $M_n (= \langle T, S \rangle)$ 74

Select Number of Conversion Function Iterations P 76

Internal Identifier K Extraction Determination 78 (optional)

(optional)
Criteria Present? 80

YES
Define m, A, AV per statistics and/or computations ex: final Image G File Size 82 (optional)

NO
Select m, A, AV stochastically 84

Counter Statistics 86

Insert User Info? 88 (optional)

YES
Insert User Info Into S 90 (optional)

NO
Transform M_n to form Logical Scales LS_i 92

Form Transformed Structural Element $S' (= \langle LS_1, LS_2, \dots \rangle)$ 94

Select Internal Identifier K Bit-length and Shift Parameters 96 (optional)

Scramble Internal Identifier K with Scrambling Function to Obtain K' 98 (optional)

Form Tag Data Element T 100

Code Tag T to Obtain Partially coded Tag Data Element T' 102 (optional)

Extract Internal Identifier? K 104 (optional)

YES
Extract K from $\langle T', S' \rangle$ 106

Store:
 K in file FID (no scrambling) (embodiment)
OR
 K' in file FID' (with scrambling) (embodiment) 108 (optional)

NO
Select External Key K^x 110

Code T' with K^x to obtain coded Tag Data Element T'' 112

Form $M_{n+1} (= \langle T'', S' \rangle)$ 114

P^{th} Iteration? 116

YES
Encrypted Final Image G

NO

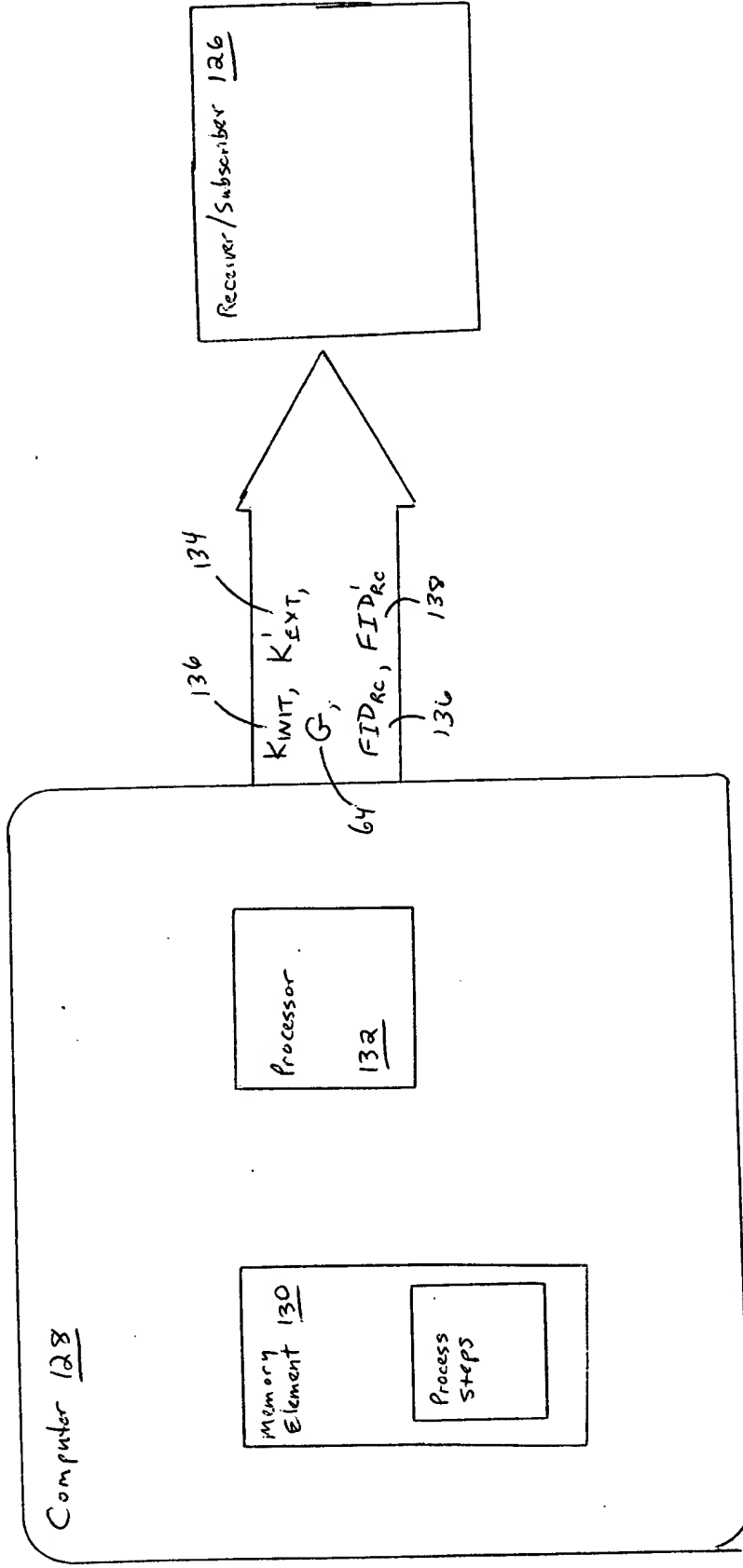


FIGURE 5